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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|------------------------------|------------------|
| 10/717,463 | 11/21/2003 | Xiao Lu | 16318-1US RC/DSIM/ab | 8074 |
| 20559 | 7590 | 09/07/2005 | EXAMINER | |
| ROBIC CENTRE CDP CAPITAL 1001, VICTORIA SQUARE - BLOC E - 8TH FLOOR MONTREAL, QC H2Z 2B7 CANADA | | | MCCORMICK EWOLDT, SUSAN BETH | |
| | | ART UNIT | | PAPER NUMBER |
| | | 1655 | | |
| DATE MAILED: 09/07/2005 | | | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/717,463 | LU ET AL. | |
| | Examiner | Art Unit | |
| | S. B. McCormick-Ewoldt | 1655 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 08 March 2005.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) 29-40 is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-28 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>November 21, 2003</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The Power of Attorney and Response to Office Action submitted March 8, 2005 should have been submitted as a separate paper as required by 37 CFR 1.4(c). The paper has been entered. However, all future correspondence must comply with 37 CFR 1.4.

Status of Application

The Art Unit location of your application in the PTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Group Art Unit 1655.

Election/Restrictions

Applicant's election of Group I in the reply filed on March 8, 2005 is acknowledged. Because Applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claims 29-40 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on March 8, 2005.

Claims Pending

Claims 1-28 will be examined on the merits. Claims 29-40 have been withdrawn from examination.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 4, 9 and 16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention.

In claims 4 and 16, the term “substantially” is indefinite because is not clear what is encompassed by this term. Clarification is needed.

Claim 9 recites the limitation “said solid material” in lines 1 and 2. There is insufficient antecedent basis for this limitation in the claim. Claim 1 recites “semi-solid material” so the basis for “solid material” is unclear.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 7, 11-14 rejected under 35 U.S.C. 102(b) as being anticipated by Kutney *et al.* (US 5,770,749).

Kutney *et al.* (US 5,770,749) teach a process for pulping soap using a ketone (i.e. acetone or propan-2-one) and methanol to obtain the phytosterol and amounts, β -sitosterol (62.6% and 64.7%), campesterol (16.6% and 16.4%) and stigmastanol (23.2% and 17.2%). The process is carried out from a temperature of about 25°C to about 150°C. (See column 5, lines 27-30, 36-37, 51; column 6, lines 30-36 and Example 1). Thus process method for pulping soap by Kutney *et al.* meet the limitations of claim 1 and thus anticipates the claimed invention.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the Examiner presumes that the subject matter of the various

Art Unit: 1655

claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the Examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kutney *et al.* (US 5,770,749) and Johansson *et al.* (US 4, 044, 031).

Kutney *et al.* (US 5,770,749) discloses a process for pulping soap using a ketone (i.e. acetone or propan-2-one) and methanol to obtain the phytosterol and amounts, β -sitosterol (62.6% and 64.7%), campesterol (16.6% and 16.4%) and stigmastanol (23.2% and 17.2%). The process is carried out from a temperature of about 25°C to about 150°C. Kutney *et al.* does not separate the phases into a liquid or solid stage. However, since the reference teaches the process of pulping soap in the same method as claimed, the reference extract would intrinsically have the same characteristics as claimed. Even though the reference does not teach the metal salts this would be inherent because the reference composition is the same as the claimed composition.

Johansson *et al.* (US 4, 044, 031) discloses separating tall oil (i.e. pulping soap) from sterols with acetone (i.e. propan-2-one), to obtain pure sterols from the unsaponifiable fraction and then adding a second solvent to further separate (column 2, lines 12-59; Example 2).

The references taken together disclose using a solvent to separate the pulping soap by using different extracts into a liquid phase and a solid phase. By separating into a solid phase one can extract fatty acids as taught by Johansson. Thus, a person of ordinary skill in the art would reasonably expect to separate the fatty acids and phytosterols by using a two-step process of extraction to obtain additional fatty acids and phytosterols. Based on this reasonable expectation for success, a person of ordinary skill in the art would be motivated to modify the teachings of the references to include an additional step of extraction. From the teaching of the references, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention.

Therefore, the invention as a whole was *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the reference, especially in the absence of evidence to the contrary.

Summary

No claim is allowed.

Correspondence

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Susan B. McCormick-Ewoldt whose telephone number is (571) 272-0981. The Examiner can normally be reached Monday through Thursday from 6:00 a.m. to 4:30 p.m.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Bruce Campell, can be reached on (571) 272-0974. The official fax number for the group is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

sbme

Susan D. Lee
8-30-05
SUSAN COE
PRIMARY EXAMINER